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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,427	09/12/2003	Charles Chester Irwin JR.	ABI003PU	4872
66048	7590	01/24/2007	EXAMINER	
DR. CHARLES WALTER 9131 TIMBERSIDE DRIVE HOUSTON, TX 77025			NEUDER, WILLIAM P	
			ART UNIT	PAPER NUMBER
			3672	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/24/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/660,427	IRWIN, CHARLES CHESTER	
	<b>Examiner</b>	<b>Art Unit</b>	
	William P. Neuder	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 11 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-9, 12 and 15-31 is/are rejected.
- 7) ☒ Claim(s) 13 and 32-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 15-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1,3,5 and 6 state, "that may simultaneously inject thermodynamically treated fluids". This type of language is indefinite in that one of ordinary skill cannot determine the bounds of the claim. Do the claims require the thermodynamic fluid to be injected or not? The claims have been treated as if they do not require the thermodynamic fluid to be injected.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoitsits et al. 5,421,408.

Claim 1 only requires a thermodynamic oil and gas recovery system. As shown in col. 1, lines 10-20, clearly the oil is recovered along with the gas that will be reinjected after separation from the crude. Since all produced fluids are at elevated temperatures,

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clearly this is a thermodynamic oil and gas recovery system. As to claims 2 and 3, a pressure sensor at the bottom of the well is used to control injection rates. While the sensor is at the bottom of the well, it is the wellhead pressure that controls the injection rate. As to claim 4, the gas can be injected in pulses. As to claims 5 and 6, the gas and liquid can be injected while producing. As to claim 7, the gases injected are gases recovered by the oil and gas well. As to claim 8, the liquid injected is liquid recovered from the well. As to claim 9, the liquids could include saltwater.

Claims 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by McCarvell et al 3147808.

McCarvell discloses a system for injecting thermodynamic lift gas controlled by wellhead pressure. As to claim 4, the gas can be injected in pulses. As to claim 5, the device can inject fluids without interrupting production (see col. 5, lines 35-37).

Claims 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dalsmo et al 6,595,294.

Dalsmo discloses thermodynamic gas lift injection controlled by wellhead pressure. As to claim 4, the gas can be injected in pulses. As to claim 5, the gas can be injected without interrupting production.

Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Prats et al 3727686.

Prats discloses a method of simultaneously injecting gas (air) and liquid into a well (see figure 1). As to claim 12, the liquid is a thermodynamic fluid.

***Allowable Subject Matter***

Claims 13 and 32-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10 and 11 are allowed.

Claims 15-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 11/2/06 have been fully considered but they are not persuasive. Applicant argues that Stoisits does not disclose a recovery system. Clearly Stoisits recovers the crude along with the gas to be separated and reinjected. This is a recovery system. With respect to applicant's argument that Stoisits does not mix the water and gas in a compressor, the claims do not require this. With respect to Prates, applicant argues that prates is not a recovery system. Clearly crude and gas are recovered and this is a recovery system. With respect to McCarvell applicant argues that McCarvell is a plunger type system. There are no limitations in the claims that preclude a reading of a plunger system on the claims. With respect to Dalsmo applicant argues that he uses chokes and controllers to optimize gas lift, while applicant's device does not use chokes and controllers. There are no claim limitations that preclude a reading of a device using chokes and controllers on the claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William P Neuder  
Primary Examiner  
Art Unit 3672

W.P.N.